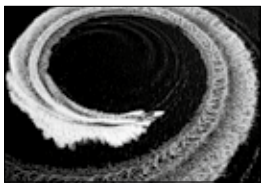
E80/E85

- dedicated solutions



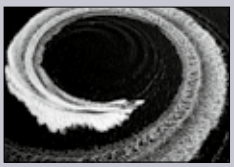
GLAMOX aqua signal®

GLOBAL MARINE & OFFSHORE
LIGHTING SOLUTIONS

Commercial Marine

Cruise & Ferries

Oil & Gas



Recreational Boats

Navy

Obstruction Lighting

E80/E85 - dedicated solutions

Glamox E80 for directional marking light and E85 for escape route light is both based on LED. This results in a discrete look and makes it easier to fit in with its intended interior.

Glamox E80 has different types of signs that can be mounted for different applications such as wall flag, surface mounted and recessed. Glamox E85 is an LED based escape route light with a new and innovative reflector technique that covers 17m x 3m according to the requirements for escape route lighting. Because of its oval light distribution it is ideal for escape route lighting.

Glamox E80 and E85 gives you the possibility to design an emergency lighting scheme in a safe manner without having the luminaires dominate the interior design concept.

Great care has been taken to ensure that illustrations and technical specifications in this brochure are correct at time of publication.

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Emergency light standards

INTERNATIONAL / NATIONAL / EUROPEAN STANDARDS

EN 1838:1999 Emergency light includes light technical conditions like reading distance, uniformity and level of light.

EN 50171:2001 CENTRAL POWER SUPPLY SYSTEMS

Central power supply systems is a system standard that includes design, operation and maintenance of a central based emergency power supply. This is then referring to product standards for UPS and emergency luminaires.

EN 50172:2004/BS 5266-8:2004 EMERGENCY LIGHT SYSTEMS

System standard for emergency light. This is a system standard that includes design, operation and maintenance of an emergency light system. This is then referring to productstandards for Emergency luminaires andstationary batteries.

IEC 60598-2-22 (EMERGENCY LUMINAIRES)

Product standards for emergency luminaires and Uninterruptible Power Systems (UPS).

The Health and Safety (Safety Signs and Signals) Regulations 1996 state that final exits and locations where the escape route may be unclear must have signs installed to reduce uncertainty.

Plan according to rules and regulations. The classification society will approve the installation according to IEC, IMO and Solas standards.

Areas of use

Planning emergency lights in your projects is not just about showing users the escape route. Lights must be carefully located to provide sufficient illumination according to the different areas of premises and must conform to the latest legislation. An emergency escape lighting system should normally cover the following areas:

Escape routes with exit doors

Intersections of corridors

In change of direction

Staircase

Emergency escape signs

Fire fighting equipment

Task that needs to be shut down and turned on in an emergency

Changes in floor level

Escape route lighting

Escape route lighting has a superior objective to contribute to a safe evacuation from an area when standard illumination fails. That part of the building, which is prepared for evacuation, should be easily identified and used with great safety. Luminaires prepared for escape route lighting are divided into route lighting and sign lighting.

Exit and escape route lighting

Should mark changes in direction of emergency exit escape routes where it is not possible to spot the emergency exit. Signs directing escape routes should be illuminated or externally illuminated.

Sign height "H" should consider the reading distance and be dimensioned according to the following formula:
For external lit signs:
H = reading distance / 200
For illuminated signs:
H = reading distance / 100

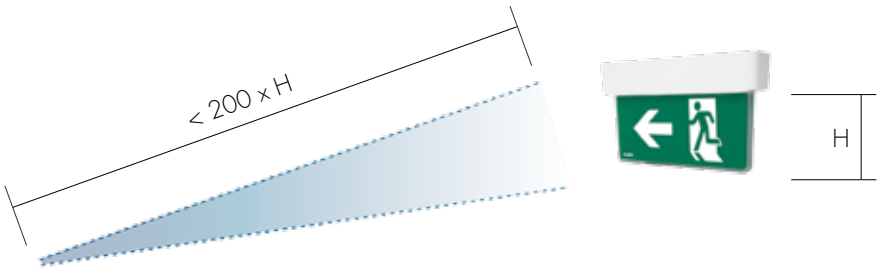
Glamox E80 is designed for a maximum reading distance of 20 or optional 30 meters.

Route lighting

Should provide ample lighting to make an evacuation possible in a safe way. For escape routes up to 2 m widths the horizontal illumination on the floor should not be less than 1 lux in the centre line of the escape route and outside the centre line the illumination should be minimum 50% of the lowest level of the centre line. The scale between maximum to minimum illumination level should not exceed 40:1.

High-risk lighting

In areas where high-risk operations are carried out, special requirements for emergency lighting prevail. For high-risk areas the emergency lighting should not be less than 10% of standard lighting and minimum 15 lux. The scale between maximum and minimum illumination level should not exceed 10:1.



Glamox E80 is designed for a maximum reading distance of 20 or optional 30 meters

Escape route lighting

Corridors and intersections of corridors

In a ship it is important to have emergency lighting that clearly illuminates corridors and where there are changes in direction. This allows users to clearly identify their means of escape and should highlight the escape route signs.

Possible solution

Doors and exits

Ensuring that exit doors are well lit in an emergency can be the difference between evacuating a ship and getting trapped inside. All exit doors need to be well lit to ensure that users can identify where to go at the end of escape routes.

Possible solution

Escape route lighting

Stairways

Stairways and stairwells can present a potential hazard in an emergency.
Emergency lights need to be fitted so that this challenging area are made visible and safe to use.

Possible solution

Changes in floor levels

Uneven flooring on escape routes needs to be illuminated so that in emergency users can act accordingly. In areas where flooring may become uneven on an escape route, a lighting unit should be fitted to so that it does not prove a danger to users.
Uneven flooring can consist of single steps, ramps, sloping floors etc.

Possible solution

Essential lighting

High-risk areas

In areas where high-risk operations are carried out special requirements for emergency lighting prevail. For high-risk areas the emergency lighting should not be less than for the standard lighting or minimum 10% of standard lighting. Areas with heavy machinery and physical risk need to be kept well lit to allow to shut down the machines and to avoid injury

Possible solution

Large areas

Where a large number of persons are gathered, illumination of an area should provide sufficient emergency lighting, so that persons are able to arrive at a place where the escape route can be identified. For large areas the horizontal illumination on the floor should not be less than 0.5 lux, and the scale between maximum and minimum illumination level should not exceed 40:1.

Possible solution

EXIT

Products

E80-S is a surface mounted exit sign based on LED. Signs for both 20 and 30 metre reading distance are available. Can be supplied for manual, selftest and central controlled testing and monitoring. Using a environment friendly NiMh battery. Signs are included.

E80-S is covered by a five year warranty. More information available on www.glamox.com/gmo

E80-S

DNV

ACCESSORIES	Wall bracket, flag bracket and suspension must be ordered separately.
BODY MATERIAL AND COLOUR	White painted aluminium with component plate in Polycarbonate.
CONNECTION	Cable entry on top and knock-out in each side. 3 or 5 pole terminal block.
EMERGENCY SYSTEM	Supplied in standard (S), selftest (ST) or addressable (DALI) system for 1 or 3 hours duration.
MOUNTING	For surface ceiling mounting. Flag, wall and suspended possible by using a kit. The kit must be ordered separately.

Selection of items, for more items and details see our web.

Product	Part.no
E80-S 10x26 DOWN LED E3/S	E80103110
E80-S 10x26 DOWN LED E3/ST	E80103210
E80-S 10x26 DOWN LED E3/DALI	E80103310
E80-S 10x26 L/R LED E3/S	E80103120
E80-S 10x26 L/R LED E3/ST	E80103220
E80-S 10x26 L/R LED E3/DALI	E80103320

E80-R is a recessed exit sign luminaire based on LED. Signs for both 20 and 30 metre reading distance are available. Can be supplied for manual, selftest and central controlled testing and monitoring. Using an environment friendly NiMh battery. Signs are included.

E80-R(M) is covered by a five year warranty. More information available on www.glamox.com/gmo

E80-R(M)

DNV B0 B15

BODY MATERIAL AND COLOUR	White painted aluminium with component box in steel.
CONNECTION	3 or 5 pole terminal block.
EMERGENCY SYSTEM	Supplied in standard (S), selftest (ST) or addressable (DALI) system for 1 or 3 hours duration.
MOUNTING	For recessed mounting.

Selection of items, for more items and details see our web.

Product	Part.no
E80-R(M) 10x26 DOWN LED E3/S	E80203110
E80-R(M) 10x26 DOWN LED E3/ST	E80203210
E80-R(M) 10x26 DOWN LED E3/DALI	E80203310
E80-R(M) 10x26 L/R LED E3/S	E80203120
E80-R(M) 10x26 L/R LED E3/ST	E80203220
E80-R(M) 10x26 L/R LED E3/DALI	E80203320

E85-S WB / E85-S C

DNV

BODY MATERIAL AND COLOUR	White painted aluminium with gear tray in Polycarbonate.
CONNECTION	Cable entry on top and knock-out in each end. A 3 or 5 pole terminal block.
EMERGENCY SYSTEM	Supplied in standard (S), selftest (ST) or addressable (DALI) system for 1 or 3 hours duration.
MOUNTING	For surface ceiling mounting.

E85-S is a surface mounted escape rout light or anti panic emergency light system based on LED. The escape route system, E85-S C, is especially designed for corridors and covers a 17 meter corridor with 1 lux in centre line. The anti panic light, E85-S WB, have a circular wide beam light distribution that covers 8 x 8 meter with the required 0,5 lux. Both variants can be supplied for manual, selftest and central controlled testing and monitoring. Using a environment friendly NiMh battery.

E85-S is covered by a five year warranty. More information available on www.glamox.com/gmo

Selection of items, for more items and details see our web.

Product	Part.no
E85-S WB LED E3/S	E85113100
E85-S WB LED E3/ST	E85113200
E85-S WB LED E3/DALI	E85113300
E85-S C LED E3/DALI	E85103300
E85-S C LED E3/S	E85103100
E85-S C LED E3/ST	E85103200

E85-R(M) WB / E85-R(M) C

DNV B0 B15

BODY MATERIAL AND COLOUR	White painted aluminium with component box in steel.
CONNECTION	A 3 or 5 pole terminal block.
EMERGENCY SYSTEM	Supplied in standard (S), selftest (ST) or addressable (DALI) system for 1 or 3 hours duration.
MOUNTING	For recessed mounting.

E85-R is a recessed escape rout light or anti panic emergency light system based on LED. The escape route system, E85-R C, is especially designed for corridors and covers a 17 meter corridor with 1 lux in centre line. The anti panic light, E85-R WB, have a circular wide beam light distribution that covers 8 x 8 meter with the required 0,5 lux. Both variants can be supplied for manual, selftest and central controlled testing and monitoring. Using an environment friendly NiMh battery.

E85-R(M) is covered by a five year warranty. More information available on www.glamox.com/gmo

Selection of items, for more items and details see our web.

Product	Part.no
E85-R(M) C LED E3/S	E85203100
E85-R(M) C LED E3/ST	E85203200
E85-R(M) C LED E3/DALI	E85203300
E85-R(M) WB LED E3/S	E85213100
E85-R(M) WB LED E3/ST	E85213200
E85-R(M) WB LED E3/DALI	E85213300

Better solutions easier

System solutions

Manual test (S)
When using manual test one has to disconnect the power supply to the emergency light and note the luminaires that are working. The test can not last for more then 25% of the prescribed light duration. This shall be done at least once a month (ACC. to EN 1838). Once a year a full duration test of the system has to be carried out in order to test the capacity of the battery. All test results have to be logged with status.

Selftest (ST)
When using ST luminaires the electronic unit takes over the tests according to the regulations. Status is presented through the two colour LED inside the luminaire. All test results have to be logged with status.

Addressable (DALI)
Digital Addressable Lighting Interface. A standardised addressable system for centralised monitoring and operation. The system is very easy to commission and all test status is automatically logged.

Lowering your maintenance cost

The LED technology combined with a unique and afficient reflector results in smaller batteries and therefore lower maintenance cost.

Long lifetime

Modern LED technology with low current gives up to 100.000 hours lifetime on the light source.

Covers a large area, gives fewer luminaires

Because of the asymmetric light distribution E85 gives a optimal light in a corridor with a minimum number of luminaires.

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